

## Letter to the BMJ editor

In response to:

### **Non-absorbable disaccharides for hepatic encephalopathy: systematic review of randomised trials**

Bodil Als-Nielsen, Lise L Gluud, Christian Gluud

We would like to applaud Bodil Als-Nielsen et al. on their excellent systematic review of randomised trials using lactulose/lactitol for hepatic encephalopathy (HE), (1) which in our opinion has been warranted for some time. We agree that non-absorbable disaccharides have been introduced into clinical practice without any convincing evidence base, but question the authors' conclusion that there is 'insufficient evidence' to determine whether non-absorbable disaccharides are of benefit to patients with HE. Surely, this comprehensive review clearly demonstrates that lactulose is 'ineffective' for treatment of HE rather than there being 'insufficient evidence'. Furthermore, the results of this study have several important implications:

- (a) What should comprise standard medical therapy for HE? Lactulose should no longer be included, but strict attention should be paid to treating the precipitating factors, with correction of dehydration, electrolyte and acid-base imbalance, (2) constipation and infection.
- (3)
- (b) A plea for placebo controlled trials: There should be no restriction on the conduct of placebo controlled studies on ethical grounds.

- (c) We need to go back to the drawing board to revisit the interorgan metabolism of ammonia and reference the recent studies which demonstrate the important roles of the small intestine, muscle and kidneys in regulating the blood levels of ammonia. (4)

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4. Olde Damink S, Jalan R, Deutz N, Redhead D, Dejong C, Hynd P et al. The kidney plays a major role in the hyperammonemia seen after a simulated or actual upper gastrointestinal bleeding in patients with cirrhosis. *Hepatology* 2003; 37:1277-1285.